

Inspection Date: January 19, 2012
Start: 9:15 am
Weather: 20's, Clear
Site: XTO Energy, Inc. – Fancher Site
Location: near Four States, Marion County, WV

The Fancher Well Pad Site ("Site") is operated by XTO Energy, Inc. (XTO) and is located off of Grays Run Road (County Road 44) in Four States, Marion County, West Virginia, approximately 500 linear feet (lf) north of the intersection of County Road 11/5 and Grays Run Road/County Road 44. The Site is located adjacent to unnamed tributaries of Tevebaugh Creek, which flow approximately 500 lf to Tevebaugh Creek, which flows approximately 4.1 miles to the West Fork River, a tributary of the Monongahela River. According to the Pittsburgh District of the U.S. Army Corps of Engineers ("Corps"), the West Fork River (74.0 miles above its mouth) is considered the nearest traditional navigable water (TNW).

On January 19, 2012, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) conducted a Clean Water Act Section 404 inspection at the Fancher Well Pad. Individuals at the inspection included representatives from the EPA; Pittsburgh Corps; West Virginia Department of Environmental Protection's (WVDEP) Environmental Enforcement, Dam Safety, and Oil & Gas offices; U.S. Fish and Wildlife Service (USFWS); XTO; Ecotune, XTO's environmental consultants; and Babst Calland, XTO's counsel. See sign-in sheet.

The Corps issued a Cease and Desist on January 26, 2012.

According to Soil Survey Geographic Database (SSURGO) mapping, the western half of the Site is underlain by Culleoka-Westmoreland silt loam (CwF), a mixture of Culleoka silt loam (55%) and Westmoreland silt loam (25%). Both are well-drained soils found on hillslopes on hills, and ridges on hills with parent material consisting of loamy residuum weathered from limestone, sandstone, and shale. The eastern half of the Site is underlain by Clarksburg silt loam (CkD), moderately well-drained soils located on drainageways on hills. Neither soil meets hydric criteria.

XTO stated that the well pad construction started in April 2010 and finished June 2010. According to XTO, prior to construction of the pad, no wetland or stream delineations were conducted at the Site.

Stream 1 – Stream 1 is an unmapped, unnamed tributary to a USGS-mapped unnamed tributary to Tevebaugh Creek. Stream 1 was realigned and culverted for approximately **30 lf** for an access road to the well pad. Downstream of the culvert, the stream had been channelized for approximately **80 lf**. The approximately 100 lf of stream between the disturbance and the confluence with UNT Tevebaugh did not appear to have been disturbed. Stream 1 had bed and bank and substrate consisting mostly of gravel. EPA's Office of Monitoring and Assessment (OMA) sampled macroinvertebrates upstream and found macroinvertebrate taxa that included Ephemeroptera, Plecoptera, Trichoptera, Diptera, and Isopoda (see OMA memo). Stream 1 is likely perennial based on the abundance, diversity and type of

obligate aquatic macroinvertebrates found in these streams. The watershed area was estimated to be 12 acres. Specific conductivity was measured at 112 $\mu\text{S}/\text{cm}$.

Stream 2 and Riparian Wetland(s) – Stream 2 is a USGS-mapped, unnamed tributary to Tevebaugh Creek. Sediment was observed washing into the stream. **Areas of impact below the ordinary high water mark (OHWM) were observed.** Silt sock lined the banks of the channel. Wood chips from a damaged silt sock were noted in the channel.

Riparian wetlands abutting Stream 2 had been filled by the well pad (see map).

- Soil pit #1 (0-10") was located at the toe of the well pad slope (SW corner - see map) and had 2-6" of fill underlain by hydric soil (7.5 YR 3/2). Vegetation was dominated by reed canary grass (*Phalaris arundinacea*). Hydrology was at the surface.
- Soil pit #2 was comprised of non-hydric soil.
- Soil Pit # 3 (0-9") was also located at the toe of the well pad slope. At least 4" of fill was underlain by hydric soil 10 YR 4/2 with oxidized rhizospheres (common and distinct). Water in pit was @ 7inches. Vegetation was dominated by reed canary grass.

Wetland North of Well Pad – **A PEM wetland north of the well pad had been filled with rock and soil used in the construction of the well pad.** The wetland was inundated and dominated by hydrophytes including reed canary grass, soft rush (*Juncus effusus*) and sedges (*Carex* spp.). Hydrophytic vegetation continued up the slope of the well pad. Soils were hydric (10 YR 3/2). The wetland was the length of the well pad (~150 lf). Runoff diverted around the eastern side of the well pad contributed hydrology to the wetland area.

Ecotone indicated that the top soil had been excavated and only subsoil remained in much of the area.